Procedure Guidelines for Radiofrequency **RaVoR™** Surgery of the Soft Palate and RF-UPP



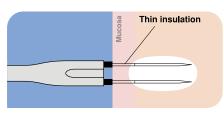


Fig. 1: Correctly placed RaVoR™ bipolar electrode. Complete insertion of the thin insulation protects the mucosa from surface lesions.



Fig. 2: Puncture sites for the application of radiofrequency energy in the soft palate with $\mbox{RaVoR}^{\mbox{\tiny TM}}$ bipolar electrode (REF: 70 44 95).

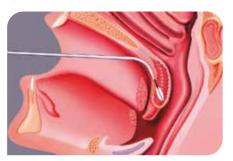


Fig. 3: Illustration showing the correct position of the RaVoR™ bipolar electrode in the middle of the soft palate tissue.



Fig. 4: Dissection of surplus uvula tissue and incision lines for the triangular excision of the posterior palatal pillars.

Indications and contraindications

Palatal snoring in connection with primary snoring or mild obstructive sleep apnea, which otherwise requires no separate treatment.

Patient preparation

The intervention is performed under local anesthesia on an outpatient basis. Preoperatively apply a surface anesthetic (e.g. lidocaine spray) and inject a local anesthetic together with a vasoconstrictor (e.g. lidocaine 2 % plus adrenaline 1:200 000) just behind the line between the stiff and the soft palate and at the base of the uvula (about 5 to 8 times in total). Verify that the insulation of both the monopolar and bipolar electrodes is intact before using them. Do not use defective or damaged instruments to avoid the risk of burns.

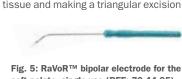
Intervention

RaVoR™ (Radiofrequency-Volume-Reduction)

Thanks to the Plug and Operate feature, the RaVoR™ bipolar electrode is automatically recognized when $it is connected to the \, CURIS @\, 4\, MHz \, radio frequency \, generator \, and \, the \, settings \, are \, selected \, automatical-dependent of the \, CURIS @\, 4\, MHz \, radio frequency \, generator \, and \, the \, settings \, are \, selected \, automatical-dependent of the \, CURIS @\, 4\, MHz \, radio frequency \, generator \, and \, the \, settings \, are \, selected \, automatical-dependent of the \, CURIS @\, 4\, MHz \, radio frequency \, generator \, and \, the \, settings \, are \, selected \, automatical-dependent of the \, curve \, and \, curve \, are \, curve \, and \, curve \, are \, cur$ ly. Insert the RaVoR™ bipolar electrode (REF: 70 44 95) (Fig. 5) just behind the line between the stiff and the soft palate. Insert the electrode completely with its thin insulation layer (Fig 1). Administer the first puncture median and, depending on the anatomy, 1 or 2 applications laterally to the right and left (Fig. 2). Insert the needle into the middle of the soft palate tissue to avoid lesions of the oral and pharyngeal surfaces of the palate (Fig. 3). Visible changes in the mucosa are not likely. Stop applying energy if you observe a slight, white discoloring of the mucosa. In the case of a second session, choose neighboring puncture sites and do not insert the probe in the same place.

Uvula Resection

If the uvula and the posterior palatal pillars have excess mucosa tissue (webbing), dissect the surplus mucosa with a cutting electrode (ARROWtip™ monopolar microdissection electrode REF: 36 44 42). Be careful to avoid lesions of the uvular muscles and the palatal pillars when cutting away excess mucosa tissue and making a triangular excision to remove surplus tissue of the posterior palatal pillar (Fig. 4).



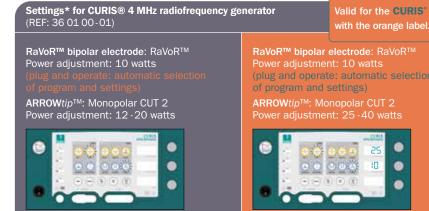
soft palate, single-use (REF: 70 44 95)

Fig. 6: ARROWtip™ monopolar microdissection electrode, single-use (REF: 36 44 42)

For further accessories see back page.

Postoperative treatment

Specific postoperative treatment is not required. If necessary, prescribe analgetics. The pain might be stronger if it had been necessary to dissect excess mucosa. Inform your patients that the therapeutic effect will occur with a delay. In the days following surgery, snoring symptoms may temporarily be more pronounced due to postoperative tissue swelling.



* Always start with the lowest settings to achieve the desired effects. If necessary, increase the settings stepby-step until the desired effect is achieved. This may even be 50 watts or higher. The settings may differ from patient to patient, from tissue to tissue, and have to be adjusted accordingly.

Please consider that this information is not meant to serve as a detailed treatment guide.

For further accessories see back page.

Recommended products for this treatment





Qty.	REF	Description
1	70 44 95	RaVoR™ bipolar Electrode for the soft palate, single-use working length: 103 mm





ARROWtip™ monopolar microdissection electrode

Qty.	REF	Description
10	36 44 42	ARROWtip™ monopolar microdissection electrode, single-use
		total length 105 mm





CURIS® 4 MHz radiofrequency generator

Basic Equipment

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		•
	36 01 00-01	CURIS® 4 MHz radiofrequency generator (incl. mains cord, user's manual and test protocol)
	36 01 10	Foot switch with two pedals for CURIS^\circledast (cut & coag) with holding bracket, cable length: $4~\text{m}$
	36 01 14	Foot switch with two pedals for CURIS $^{\otimes}$ (cut & coag) without holding bracket, cable length: 4 m $$
	37 01 54 L	Bipolar cable for CURIS®, cable length: 3 m
	36 07 04	Monopolar handpiece (pencil) cut & coag, shaft 2.4 mm, cable length 3 m
	36 02 38	Cable for single-use patient plates, length: 3 m
(x 100)	29 00-5	Single-use patient plate, split, for adults and children, PU 20 x 5 pcs.
		36 01 10 36 01 14 37 01 54 L 36 07 04 36 02 38

Product availability is subject to regulatory approval in individual markets. Products may therefore not be available in all markets. Lengths for orientation purposes; may vary slightly.

